

# 飛行標準及適航 Flight Standards and Airworthiness

飛行標準及適航部負責簽發航空運輸企業營運人許可證(航空營運人許可證), 以及在發出許可證後監察所有持證公司的運作,確保這些公司遵守國際民用 航空組織(國際民航組織)所訂定有關飛行安全及適航的標準和建議措施。

The Flight Standards and Airworthiness Division (FSAD) is responsible for the grant of Air Operator's Certificate (AOC) and the subsequent monitoring of all AOC holders to ensure their compliance with the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO) on flight safety and airworthiness.



## 飛行標準及適航

## Flight Standards and Airworthiness

民航處人員在航機起飛前 進行審核。 CAD officer conducts an in-flight check before departure.



本部的其他職責包括簽發空勤人員和飛機維修執照,監察在香港登記的飛機的適航標準和維修水平,巡查飛機維修機構,監督輕型飛機和直升機的運作,以及監察外地航空公司在香港國際機場運作的安全水平。

Other functions of the division include the issue of flight crew and aircraft maintenance licences, monitoring of airworthiness and maintenance standards of aircraft registered in Hong Kong, inspection of aircraft maintenance organisations, supervision of light aircraft and helicopter operations, and safety oversight of foreign airline operators at Hong Kong International Airport (HKIA).

## 飛行標準組

## 簽發和續發航空營運人許可證

截至二零一七年三月三十一日,獲民航處簽發 航空營運人許可證的本地公司有十家,計為:

#### **FLIGHT STANDARDS OFFICE**

Issue and Renewal of AOC

As of 31 March 2017, there were ten Hong Kong AOC holders, namely:

香港華民航空有限公司(華民航空)	AHK Air Hong Kong Limited (AHK)
國泰航空有限公司(國泰航空)	Cathay Pacific Airways Limited (CPA)
直升機服務(香港)有限公司(直升機服務)	Heliservices (Hong Kong) Limited (HLS)
香港航空有限公司(香港航空)	Hong Kong Airlines Limited (CRK)
香港航空公務機管理有限公司(香港商務航空)	Hong Kong Airlines Corporate Jet Management Limited (HKJ)
港龍航空有限公司(港龍航空)	Hong Kong Dragon Airlines Limited (HDA)
香港快運航空有限公司(香港快運)	Hong Kong Express Airways Limited (HKE)
美捷香港商用飛機有限公司(香港商用飛機)	Metrojet Limited (MTJ)
空中快線直升機有限公司(空中快線)	Sky Shuttle Helicopters Limited (EMU)
TAG Aviation Asia Limited (TBJ)	TAG Aviation Asia Limited (TBJ)

年內,本部藉着全面巡查和審查,繼續監察本地航空營運人許可證持證公司的安全表現和營運水平。飛行標準組巡查人員執行了130次飛行和機艙安全檢查,並對航空營運人許可證持證公司作出共402次其他巡查查包括外站巡查、停機坪巡查、檢查運作記錄、視察訓練情況和審批核准考核人員。本部也按照檢查程序,評審和視察本港航空公司所使用的48台位於海外和香港的飛行模擬器,並重新簽發使用許可。此外,本部又負責監察政府飛行服務隊直升機和定翼機的運作情況。

安全監督

本部繼續對香港的航空營運人許可證持證公司實施安全監察計劃。計劃的主要目的, 是利用風險管理模式編排和統籌各項審查 工作。

另外,本部年內接獲航空業界821份強制呈報事故報告,並與各航空公司、維修機構、機場經營人和航空交通服務機構保持緊密聯繫,調查和跟進所有強制呈報的事故,務求改善航空安全,防止同類事故再次發生。

During the year, the safety performance and operating standards of Hong Kong AOC holders were monitored through a comprehensive programme of inspections and audits. In addition to 130 flight operations and cabin safety inspections, the Inspectorate staff of the Flight Standards Office conducted 402 other inspections on the AOC holders, including station inspections, ramp inspections, operational record inspections, training inspections and approval of authorised examiners. Forty-eight flight simulators located worldwide and in Hong Kong and used by local airlines were evaluated, inspected and reapproved for use in accordance with the inspection procedures. The division was also tasked with the responsibility of monitoring helicopter and fixed-wing aircraft operations of the Government Flying Service (GFS).

#### Safety Oversight

FSAD continued to implement the surveillance programme for the safety oversight of Hong Kong AOC holders. The key purpose of the programme is to apply a risk management approach to the schedule and coordination of inspection activities.

Also, a total of 821 Mandatory Occurrence Reports (MOR) from the industry were received during the year. Through close liaison with airline operators, maintenance organisations, aerodrome operator and air traffic service provider, all MORs were investigated for the purpose of enhancing aviation safety and preventing recurrence.



民航處人員進行直升機 檢查。 CAD officer conducts an

inspection on helicopter operations.

## 適航事務組

適航事務組監察所有在香港登記的飛機的維修和適航標準。該組的適航主任經驗豐富,定期審查本港航空公司的飛行站,又定期審查認可的維修和設計/生產機構,以及在香港、內地、中東、印度、亞洲其他地方、歐洲和北美洲各地城市檢查飛機,以持續監察航空營運人許可證持證公司、批核認可的維修和設計/生產機構,以及為在香港登記的飛機簽發或續發適航證。

#### 飛機維修

適航事務組繼續通過機庫檢查、公司運作審查和產品審查,定期監察所有香港認可的飛機維修和飛機部件維修機構。截至二零一七年三月三十一日,共有31家公司取得香港認可維修機構的資格。適航事務組藉持續審查和定期視察,監察多家主要維修公司,包括香港飛機工程有限公司、香港航空發動機維修服務有限公司和廈門太古飛機工程有限公司。

#### **AIRWORTHINESS OFFICE**

The Airworthiness Office monitors the maintenance and airworthiness standards of all Hong Kong registered aircraft. With a team of experienced Airworthiness Officers, the office carries out regular AOC line station audits, approved maintenance and design/production organisation audits, and aircraft surveys locally in Hong Kong as well as in cities in the Mainland, Middle East, India, other parts of Asia, Europe and North America, for the purpose of continual monitoring of AOC holders, approval of maintenance and design/production organisations, and the issue and renewal of Certificates of Airworthiness for Hong Kong registered aircraft.

#### Aircraft Maintenance

The Airworthiness Office continued to monitor all Hong Kong approved aircraft and aircraft component maintenance organisations regularly through hangar surveys, company audits and product audits. As of 31 March 2017, there were 31 Hong Kong approved maintenance organisations. Major maintenance companies, including Hong Kong Aircraft Engineering Company Limited (HAECO), Hong Kong Aero Engine Services Limited, and Taikoo (Xiamen) Aircraft Engineering Company Limited, are regulated through rolling audits and regular visits.



#### 飛機維修訓練

截至二零一七年三月三十一日,本港和內地共有五家維修訓練機構獲發《香港航空要求一 147》許可證,可以就維修香港登記的飛機 舉辦基本和指定飛機機種的維修訓練課程。

#### 飛機和相關產品/零件的設計與生產

截至二零一七年三月三十一日,共有十一家 設計和生產機構獲發《香港航空要求一21》 許可證,可以審定飛機相關產品/零件,包括 這些產品/零件的設計與生產。

#### Aircraft Maintenance Training

As of 31 March 2017, there were five HKAR-147 Aircraft Maintenance Training Organisations located in Hong Kong and the Mainland which were approved to provide basic and specific aircraft type training for the maintenance of Hong Kong registered aircraft.

#### Design and Production of Aircraft and Related Products/Parts

As of 31 March 2017, eleven HKAR-21 Design and Production Organisations were approved to provide certification of aircraft related products/parts including their design and production.



民航處人員在發動機維修機構進行審核 及檢查。

CAD officers conduct audit and inspection at engine repair facilities.



#### 民航處指定認證機構

截至二零一七年三月三十一日,共有七家機構獲發《香港航空要求一183》許可證,可以就簽發飛機適航證進行相關認證工作。

#### 適航事務組統計數字

簽發適航證

Certificate of

Airworthiness issued

29

(二零一六年四月一日至二零一七年三月 三十一日)

#### CAD Designated Organisations

As of 31 March 2017, there were seven HKAR-183 Organisations approved to carry out airworthiness related activities in support of the issue of Certificates of Airworthiness to aircraft.

#### Airworthiness Office Statistics

(between 1 April 2016 and 31 March 2017)

續發適航證 Certificate of

Airworthiness

302

註銷適航證 Certificate of Airworthiness withdrawn

15

審定重大改裝

Major Modification approved

7

Mainter

認可飛機維修機構 Approved Aircraft Maintenance Organisations

31

認可飛機維修 訓練機構

Approved Aircraft Maintenance Training Organisations

5

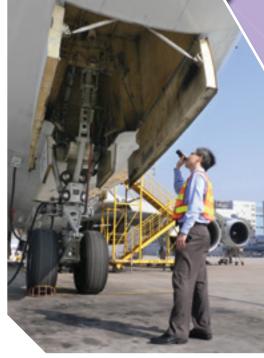
認可設計和 生產機構

Approved Design and Production Organisations

11

認可《香港航空 要求—183》機構 Approved HKAR-183 Organisations

7



民航處人員進行例行飛機檢查。

CAD officer conducts a routine aircraft survey.



民航處人員檢查安全儀器。 CAD officer conducts an inspection on safety equipment.

### 航空人員執照事務組

#### 空勤人員執照

二零一六至一七年度,航空人員執照事務組(執照事務組)共處理了4 099份申請,當中包括首次簽發和續期簽發空勤人員執照、英語可駕駛的飛機型號和儀表飛行等級、英語能力認證和轉換海外執照為香港執照。為配配業界的需求,民航處分別核准澳洲和新西蘭的飛行培訓機構,為空勤人員提供海外培訓及考試。年內,執照事務組、澳洲和新西蘭的飛行培訓機構共批閱了4 726份空勤人員執照軍試試卷。此外,又向香港空勤人員執照或航空交通管制執照持有人/申請人簽發共5 518份體檢合格證明書。

#### 飛機維修執照

截至二零一七年三月三十一日,執照事務組 共處理了794份首次簽發飛機維修執照、執照 續期和加簽可維修飛機機種的申請。年內, 該組和香港飛機工程有限公司設於將軍澳和 廈門的認可考試中心,共處理了3 448份飛機 維修執照試卷。

#### PERSONNEL LICENSING OFFICE

#### Flight Crew Licensing

During 2016-17, the Personnel Licensing Office (PELO) processed 4 099 applications, including initial grant and renewal of flight crew licences, aircraft and instrument ratings, language proficiency endorsements and conversion of foreign flight crew licences into Hong Kong licences. To meet industry demand for conducting overseas flight crew training and examinations, CAD approved Flying Training Organisations based in Australia and New Zealand respectively. During the year, PELO and the authorised examination centres in Australia and New Zealand processed 4 726 CAD flight crew licensing written examinations. In addition, 5 518 medical certificates were issued to holders/applicants of Hong Kong flight crew licence or air traffic controller's licence.

#### Aircraft Maintenance Licensing

As of 31 March 2017, PELO processed 794 applications for initial issue and renewal of aircraft maintenance licences, and endorsement of additional aircraft types in such licences. During the report period, 3 448 examination papers regarding aircraft maintenance licensing were processed by PELO and the authorised examination centre at HAECO in Tseung Kwan O and Xiamen.

## 協調本地空域使用者

為加強航空安全,由本地空域使用者組成的香港非控制區飛行安全小組繼續定期召開會議,協調香港空域的安全事宜。這些本地空域使用者包括使用定翼機和旋翼機的機構(政府飛行服務隊、中國人民解放軍駐香港部隊、空中快線、直升機服務和香港飛行總會)、香港滑翔傘協會,以及私人飛機擁有人。

## 飛機登記

年內,香港民用航空器登記冊共新增了29架航空器,同期另有七架波音B747型飛機、三架空中巴士A340型飛機、一架灣流G550型飛機、一架龐巴迪環球快車型飛機、一架賽斯納172P型飛機、一架羅賓遜R22直升機和一架Van's RV-8型飛機取消登記。截至二零一七年三月三十一日,香港民用航空器登記冊一共登記了326架民用飛機,當中288架由香港的航空營運人許可證持證公司和政府飛行服務隊擁有,詳情如下:

#### COORDINATION WITH LOCAL AIRSPACE USERS

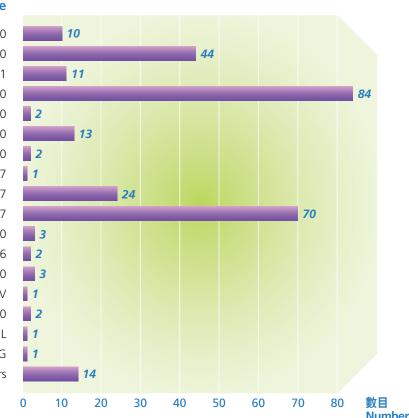
To promote flight safety, the Hong Kong Sector Flight Safety Committee comprising local airspace users continued to meet regularly to coordinate safety issues in the local airspace. These local airspace users include fixed wing operators and rotary wing operators (GFS, Hong Kong Garrison of the People's Liberation Army, EMU, HLS and Hong Kong Aviation Club), Hong Kong Paragliding Association and private aircraft owners.

#### **AIRCRAFT REGISTER**

During the year, 29 aircraft were put on the Hong Kong Civil Aircraft Register. In the same period, seven Boeing B747, three Airbus A340, one Gulfstream G550, one Bombardier Global Express, one Cessna 172P, one Robinson R22 and one Van's RV-8 were removed from the Register. As of 31 March 2017, the total number of civil aircraft in the Hong Kong Civil Aircraft Register was 326, of which 288 were registered under Hong Kong AOC holders and the GFS as follows:

#### 航空器型號 Aircraft Type

空中巴士A300型 Airbus A300 空中巴士A320型 Airbus A320 空中巴士A321型 Airbus A321 空中巴士A330型 Airbus A330 空中巴士A340型 Airbus A340 空中巴士A350型 Airbus A350 BAE 4100型 BAE 4100 波音B737型 Boeing B737 波音B747型 Boeing B747 波音B777型 Boeing B777 龐巴迪BD700型 Bombardier BD700 龐巴迪CL-600-2B16型 Bombardier CL-600-2B16 灣流G450型 Gulfstream G450 灣流GV型 Gulfstream GV 灣流G550型 Gulfstream G550 Moravan Z 242 L型 Moravan Z 242 L DA 42 NG型 DA 42 NG 直升機 Helicopters



## 持續訓練巡查人員

為確保巡查人員的專業知識和能力與時 並進,本部安排同事接受各項飛行運作和 適航事宜的訓練, 範疇包括個別型號飛機和 物料的設計及維修、飛行模擬器評審、各式 運作的審批、審查技巧, 以至安全管理 訓練。此外,他們也參與國際和地區會議、 研討會和工作組會議,與國際專家交流, 分享經驗和良好的作業方式。這些國際 會議包括國際民航組織就以下議題所舉行 的會議/研討會:遙控航空器系統、亞太地 區航空安全小組會議和安全管理國際合作組 會議。此外,本部人員又參加了歐洲航空 安全局/美國聯邦航空局國際安全會議、 以風險為本的型號合格審定工作坊、新飛機 型號的合格審定和維修審查委員會的會議, 以及各地民航當局舉辦的會議等。

#### **CONTINUOUS TRAINING FOR INSPECTING STAFF**

To maintain the technical knowledge and competence of inspecting officers in pace with the latest aviation development, the division arranged a wide spectrum of training for them on flight operations and airworthiness matters. These included training in the design and maintenance of specific types of aircraft and materials, simulator evaluation, operational approvals, auditing techniques as well as safety management. In addition, the officers participated in international and regional conferences, seminars and working group meetings to exchange and share experiences and best practices with international experts. These international events included ICAO conferences/seminars on the Remotely Piloted Aircraft Systems, Asia Pacific Regional Aviation Safety Team Meeting, Safety Management International Collaboration Group Meeting; European Aviation Safety Agency – Federal Aviation Administration International Safety Conference, Risk Based Type Certification Workshop; and Certification and Maintenance Review Board of some new aircraft types and meetings with various aviation authorities.



民航處人員為業內人士舉辦規例及要求的 簡佈會。

CAD officer delivers a briefing to industry partners on regulations and requirements.



Flight crew licences and aircraft maintenance licence issued by the Personnel Licensing Office.

